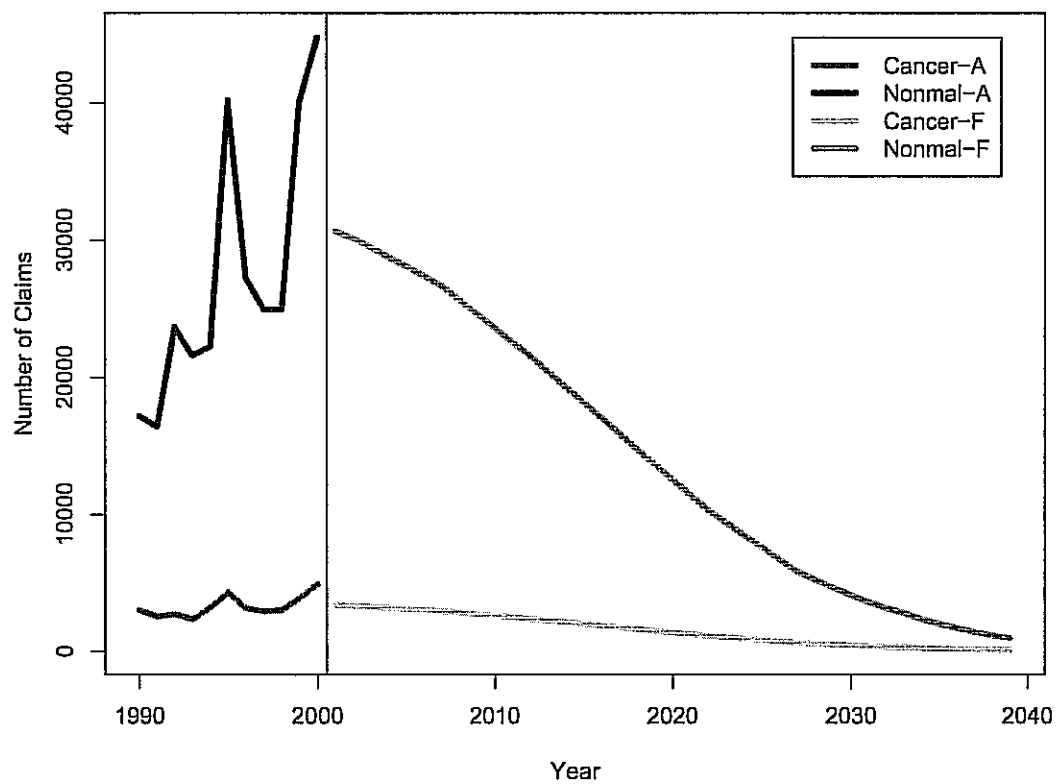
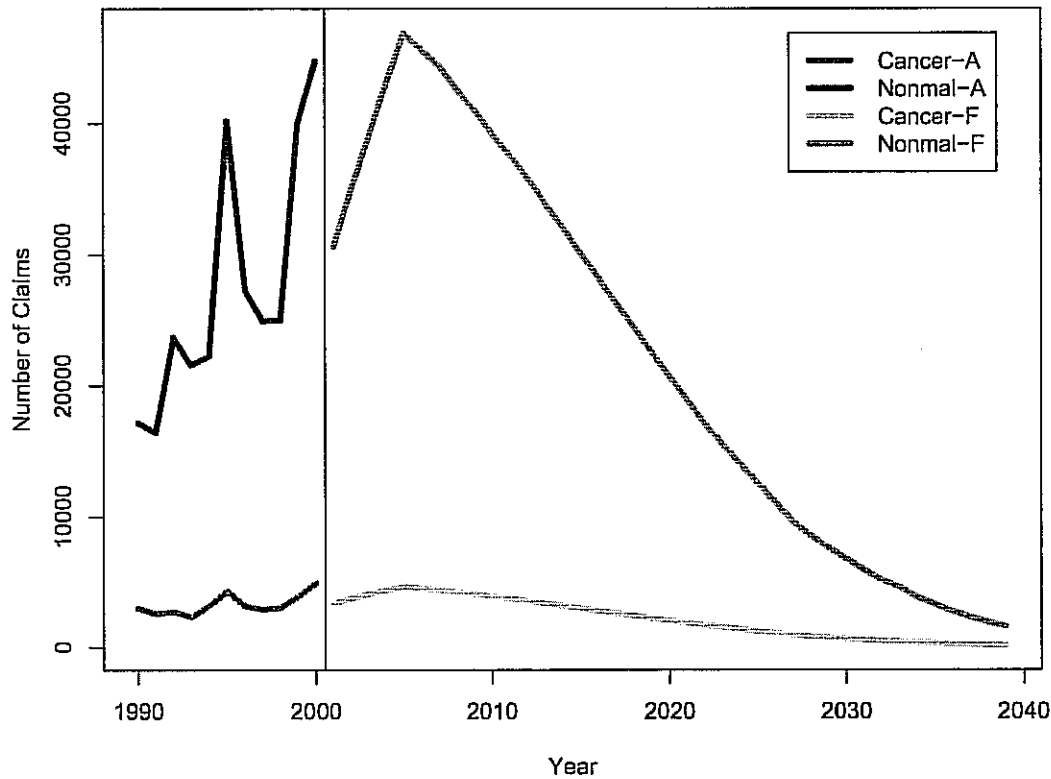


## **EXHIBIT A**

**Figure 11: Actual And Projected Filings (No Increase)**

**Figure 12: Actual And Projected Filings (Increases)**

#### 6.2.5. Forecasted Number of Future Claims

Table 12 shows the results of the forecasts for each of the two models, the preferred “Increasing” models and the “No Increasing” model which is included only to show future liability should the rate of claiming be implausibly frozen in time. Appendix B Tables B3 and B4 show the forecasted filings for each disease for each year from the last quarter of 2000 to 2039.

**Table 12: Number of Forecasted Claims Filed After October 5, 2000**

Model	Disease				Total
	Meso	Lung	Othc	Nonm	
Increasing	33,856	37,921	14,796	860,204	946,777
No Increase	25,206	26,942	8,926	551,626	612,700

#### 6.2.6. Estimating Liability for Forecasted Future Claims

To value future claims we used the same values that we used for valuing pending claims, the average amount paid by OC during the 5 years in October 2000 to resolve claims for each type of disease (see Table 8, above).

Even though amounts paid by OC in settlements have been increasing at rates far greater than inflation, we forecast conservatively that the values of future claims will remain constant in real

terms, increasing only by the projected rate of future monetary inflation, 2.5 percent per year (we use the actual rate of inflation during 2001 through 2003, which are “future” years for our forecasts). This rate was obtained from the forecasts of future inflation by the Congressional Budget Office. Table 13 shows the value of future claims based on the preferred Increasing model and the illustrative No Increase models of the rate of filing of future claims.

**Table 13: Forecast Indemnity for Future Claims after October 5, 2000**

Model	Disease				Total
	Meso	Lung	Othc	Nonm	
Increasing	\$9.4	\$2.2	\$0.4	\$8.9	\$20.9
No Increase	7.0	1.6	0.2	5.6	14.4

Notes: Billions of Year 2000 dollars. Future claims are assumed to settle 2 years after filing. Indemnity is inflation adjusted at 2.5% per year.

The results in Table 13 estimate the value that we forecast for future claims in terms of the dollars of the year when claims are allowed—these represent the amounts of allowances in each future year. However, these do not represent the present value of OC’s liabilities. Since these liabilities will mostly arise in future years, OC would not need to put aside this entire amount to pay these future claims. Rather any non-insurance assets held by OC would presumably earn income. To the extent of such earnings, OC could reserve fewer assets to pay these claims. Table 14 shows the estimated present value of these liabilities, based on a discount rate of 6% provided by L. Tersigni Consulting, financial advisors to the Asbestos Claimants Committee.

**Table 14: Present Value (PV) of Future Claims as of October 5, 2000**

Model	Disease				Total
	Meso	Lung	Othc	Nonm	
Increasing	\$3.9	\$1.0	\$0.2	\$3.9	\$9.0
No Increase	2.9	0.7	0.1	2.5	6.3

Notes: Billions of Year 2000 dollars. Future claims are assumed to settle 2 years after filing. Indemnity is inflation adjusted at 2.5% per year. Discount rate is 6%.

## 7. OC’s Total Asbestos Liability, October 5, 2000

To estimate OC’s full obligations for present and future asbestos claims, we added its forecasted indemnity for pending claims and for future claims. Table 15 shows these calculations based on using the preferred Increasing model and the illustrative No Increase model of the number of future claims.

**Table 15: OC's Total Liability for Indemnity as of October 2000**

Type of Expense	No Future Increase	Future Increase
Indemnity, Pending Claims	\$2.4	\$2.4
Indemnity, Future Claims	14.4	20.9
Total Liability	\$16.8	\$23.3

Notes: Billions of Year 2000 dollars. Pending claims are assumed to average 2 years to settlement. Future claims are assumed to settle 2 years after filing. Indemnity is inflation adjusted at 2.5% per year. Pending and future claims are both inflation adjusted.

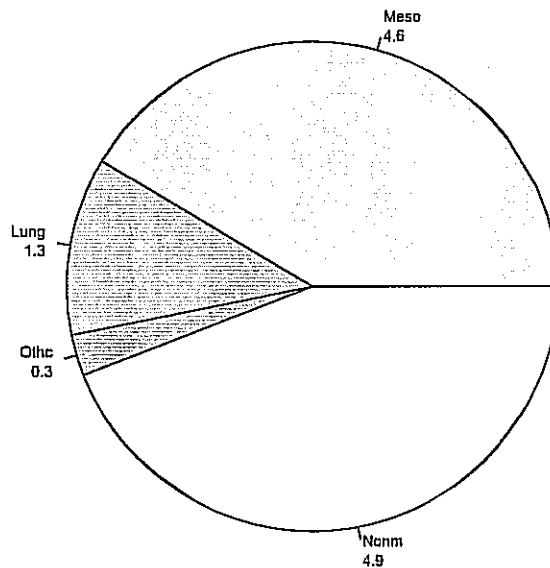
Table 16 shows the present value of OC's forecasted obligations for indemnity to asbestos claims as of October 2000, using the discount rate assumptions described above.

**Table 16: PV of OC's Total Liability for Indemnity : October 5, 2000**

Type of Expense	No Future Increase	Future Increase
Indemnity, Pending Claims	\$2.1	\$2.1
Indemnity, Future Claims	6.3	9.0
Total Liability	\$8.4	\$11.1

Notes: Billions of Year 2000 dollars. Pending claims are assumed to average 2 years to settlement. Future claims are assumed to settle 2 years after filing. Indemnity is inflation adjusted at 2.5% per year. Discount rate is 6%. Pending and future claims are both inflation adjusted and discounted.

Figure 13 shows how the present values of OC's obligations are distributed among the different types of diseases for the future increase (preferred) model.

**Figure 13: Distribution of PV of Total Liability, by Disease: Future Increase Model**

## 8. Estimation of Fibreboard's Asbestos Liabilities, October 2000

### 8.1. Forecasted Indemnity for Fibreboard Claims Pending on October 5, 2000

On October 5, 2000 when OC filed for bankruptcy protection Fibreboard had 147,250 pending asbestos bodily injury claims. We used the same formula for estimating the total indemnity that Fibreboard would pay to resolve these pending claims:

$$\text{Number of Claims} \times \text{Average Resolution Cost} = \text{Forecast Indemnity}$$

Here, counts of claims are drawn from the Fibreboard claims in OC's database and average resolution costs are based on the amounts that Fibreboard paid historically averaged across claims that were resolved without payment as well as those that received an indemnity payment.

Analyses of Fibreboard's asbestos liabilities are complicated by the company's litigation history. The injunction in the Ahearn litigation prevented filings that would otherwise have been made in those years and resulted in a concentration of filings in 1999 and 2000. The OC database provides a simple and reasonable solution for this problem. To estimate years in which these claims would have been filed against Fibreboard we identified claims that filed against both OC and Fibreboard and used the year in which the plaintiff filed the claim against OC as the "filing" year for Fibreboard. The injunction also prevented resolutions of most claims until late 1999, followed by a great number of resolutions. In the year between lifting of the Ahearn injunction and OC's petition date, Fibreboard resolved 116,395 claims. However, unlike data on filings we cannot reasonably assume that the year that these Fibreboard claims would have been resolved is

the same year in which OC had resolved a particular plaintiff's claim. So we have no ability to examine trends in settlement averages for Fibreboard.

Fibreboard claims data has also been complicated by the company's history. Fibreboard was acquired by OC in 1997 and only after that date could OC begin to incorporate Fibreboard data into OC's database. Before Fibreboard had several different databases compiled by different entities--its insurers, its coordinating counsel, the Fibreboard Interim Trust--covering sometimes different and sometimes overlapping time periods. These earlier databases are less ambitious and sophisticated than the data recently compiled by OC. Often these earlier databases lack critical elements like disease, filing dates or dates when claims were resolved. Fortunately for the most part claims in these earlier databases pertain to earlier years of litigation, mostly before the Ahearn class action had been filed, and have little relevance to the current filings levels, legal events and claim values that exist today and will likely exist in the future. After reviewing available data about these claims, we essentially agree with OC's analysis that identified 383,000 of these earlier Fibreboard claims from these pre-OC databases that OC describes as "Legacy Claims" and that OC regards as resolved, duplicate or inactive claims. (Mayer, Fibreboard, p. 3).

#### 8.1.1. Calculations within Disease Categories

Like OC, Fibreboard's resolution costs varied among different asbestos related diseases (Table 17). Fibreboard has somewhat fewer claims pending than does OC and historically paid less to resolve claims for each disease.

**Table 17: October 5, 2000 Pending Claims**

Description	Disease					Total
	Meso	Lung	Othc	Nonm	Unsp	
Number Pending	3,156	6,684	2,337	121,407	13,666	147,250
Number Resolved	10,622	19,013	5,813	254,326	89,405	379,178
Avg Settlement	\$147,084	\$32,141	\$15,167	\$4,754	\$6,290	NA
Percent Paid	88.540	87.661	87.375	88.469	40.000	NA
Avg Resolution	\$130,229	\$28,175	\$13,252	\$4,206	\$2,516	NA

Note: Average resolution amounts are expressed in year 2000 dollars and calculated across all claims resolved (both with and without payment) that were filed after 1990 and resolved between 1999 and 2000. Average settlements are calculated only among claimants who received some payment. Percent paid represents the percent of resolved claims that results in some payment. Average resolution is the product of average settlement times percent paid.

#### 8.1.2. Imputation for Unknown Disease Claims

Among Fibreboard claims that have filing dates in OC's database (i.e. that excludes many of the Legacy Claims), disease is unspecified for 21.9 percent of claims, categorized almost always as "unknown" rather than "none." This rate of unspecified claims is inflated because it includes many of the poorly documented Legacy Claims. In fact, the diseases among Fibreboard claims are well documented. Looking only at recently filed claims (1996-2000 filing dates for Fibreboard), less than 11 percent of claims have an unspecified disease, mostly claims filed in 2000 (with a rate of 27.8 percent unspecified) giving Fibreboard little opportunity to discover specific diseases. There are almost no unspecified diseases among claims that Fibreboard settled in the last two years. Among the 116,395 claims that Fibreboard resolved in 1999 and 2000 or it

knew a specific disease for all but 500 of those claims: only 0.4 percent had an unspecified disease.

As with our forecast for pending OC claims, we imputed diseases among pending Fibreboard claims both to transform alleged disease into diseases as Fibreboard would determine and also to eliminate almost all unspecified diseases. We retained the unspecified disease category for 0.5 percent of pending claims, the same rate that obtained among recently resolved Fibreboard claims. Again, these imputations were based on a transition matrix derived from the OC data fields for alleged disease and determined disease among Fibreboard claims. Table 18 shows this matrix derived from Fibreboard claims.

**Table 18: Fibreboard Experience in Evaluating Alleged Disease, 1991-2000 Filings**

Alleged Disease	Evaluated Disease					Tot
	Meso	Lung	Othc	Nonm	Unsp	
Meso	1,811	37	1	57	24	1,930
Lung	11	3,655	27	142	19	3,854
Othc	1	31	1,059	158	8	1,257
Nonm	40	332	203	79,197	661	80,433
None	0	0	1	41	13	55
Unkn	51	289	130	11,795	204	12,469
Total	1,914	4,344	1,421	91,390	929	99,998

During 1998 or later, Fibreboard cases settling by Fibreboard or OC were being allocated at just .5 percent to unspecified disease. This meant that the transition matrix adjustment would not have much of an effect, but we elected to perform it for comparability with our OC methods. Thus, we reduced the contribution proportionately to the unspecified disease category for every claimed disease, producing the following transition matrix (Table 19).

**Table 19: Derived Fibreboard Transition Matrix for Pending Cases**

Alleged Disease	Evaluated Disease					Tot
	Meso	Lung	Othc	Nonm	Unsp	
Meso	95.0	1.9	0.1	3.0	0.1	100.0
Lung	0.3	95.3	0.7	3.7	0.0	100.0
Othc	0.1	2.5	84.8	12.6	0.0	100.0
Nonm	0.1	0.4	0.3	99.2	0.0	100.0
None	0.0	0.0	2.4	96.5	1.2	100.0
Unkn	0.4	2.4	1.1	96.1	0.1	100.0

Note: Based on cross tabulation of Table 18 calibrated to produce .5 percent unspecified among pending claimants equaling OC's experience for claims resolved during 1998-2000.

We then transformed all open claims using this matrix. The resulting distributions of open and closed claims are compared in Table 20.



**Table 20:** Distributions of Pending and Resolved Claims After Allocation

Claim Status	Percent of Claims					Total
	Meso	Lung	Othc	Nonm	Unsp	
Number Pending	2.1	4.9	1.7	90.7	.5	147,250
Resolved 1998-2000	2.4	4.7	1.7	90.7	.5	118,799

**8.1.3. Calculation of Indemnity for Pending Claims**

Table 21, below, shows the number of pending claims in each disease category after imputation of diseases along with Fibreboard's average resolution cost for each disease during 1999 and 2000. The resolution cost is the average payment by OC calculated across all claims resolved by OC during this period, averaging across both claims that received payment and those that were resolved without payment. The Unspecified ("Unsp") disease category includes claims that were categorized either as "unknown" or "none" in the OC claims database. These claims were assumed to have no value but are so few in number as to not affect the forecast.

**Table 21:** Number and Average Value of Pending Claims

Description	Disease					Total
	Meso	Lung	Othc	Nonm	Unsp	
Realloc Number Pending	3,148	7,219	2,478	133,626	780	147,250
Avg Resolution	\$130,229	\$28,175	\$13,252	\$4,206	\$0	NA

Notes: After imputation of diseases. Average resolution amounts are expressed in year 2000 dollars and calculated across all claims resolved (both with and without payment) that were filed after 1990 and resolved between 1999 and 2000.

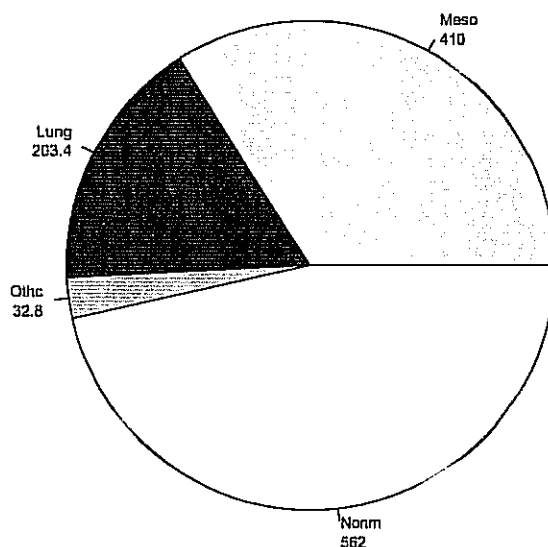
We use these numbers and values to complete the formula for deriving the values of pending claims as shown in Table 22. As that table shows, Fibreboard's liability for the indemnity of claims pending on October 5, 2000 was \$1.2 billion (in year 2000\$).

**Table 22:** Forecast of Indemnity for Pending Claims

Disease	Number of Reallocated Claims	Average Resolution	Indemnity (\$millions)
Meso	3,148	\$130.229	\$410.0
Lung	7,219	28.175	203.4
Othc	2,478	13.252	32.8
Nonm	133,626	4.206	562.0
None	780	0.000	0.0
Total	147,250	NA	\$1,208.2

Note: Average resolution amounts and indemnity are expressed in year 2000 dollars. Average resolution amounts are calculated across all claims resolved in 1999 or 2000 (both with and without payment).

Figure 14 compares graphically the total value of bankruptcy claims pending on the petition date for each type of asbestos disease.

**Figure 14:** Distribution of Indemnity Amounts for Pending Claims, by Disease

Our calculations of Fibreboard's expected indemnity for pending claims include all claims that are categorized as open in the Fibreboard claims database. These include both unliquidated claims and claims that have been liquidated but that have not been paid in full. OC has disaggregated these two groups of Fibreboard claims calculating that there are 61,344 unpaid

liquidated claims that have a total liquidated value between \$427 million and \$442 million of which \$46 million has already been paid and that there are 86,241 unliquidated pending claims which OC estimates with a total value of \$390 to \$472 million (Report of Mark W. Mayer on Fibreboard Corporation's Pre-Petition Asbestos Personal Injury and Wrongful Death Claims, May 21, 2002, p.3). We have not attempted to disaggregate these two groups of pending claims which together represent Fibreboard's expected indemnity payments for claims that have been filed but not yet fully resolved. Our estimates of the total values of all pending claims, liquidated or unliquidated is 39% greater than the upper end of OC's estimate of Fibreboard's summed liabilities for unpaid-liquidated and unliquidated claims, OC's analysis is based on questionable assumptions. OC inappropriately uses Dr. Friedman's study of an unrepresentative sample of OC claims (Section 10.1, below) to estimate severity among nonmalignant claims and OC uses values of asbestos claims that are substantially lower than its actual resolutions of similar claims just before it filed for bankruptcy protection (OC used unreliable valuation assumptions made by its consultant Dr. Vasquez. See Section 10.2.4).

## 8.2. Projections of Number And Timing of Future Claims

To forecast the number, disease distribution and filing years of future Fibreboard claims we use the same standard methods used for our OC forecasts, but we first address distortion in annual claim filings that resulted from the Ahearn injunction. While the Ahearn class action was sub judice, most potential plaintiffs were enjoined from suing Fibreboard. An interim trust established by the Ahearn settlement did receive and process exigent and trial calendar claims. No other claims were permitted. As a result most Fibreboard claims that would have been filed between 1993 into 1999 could only accrue, remaining unfilled. Then after the Ahearn injunction was lifted in 1999 Fibreboard received over 200,000 claims including both accrued and newly arising claims. This pattern of actual claim filings cannot be used directly to forecast likely future claims against Fibreboard. Clearly Fibreboard will not continue to receive future claims at the annual rates of the last two years. To forecast future claims, we identified claims that filed against both OC and Fibreboard and approximated what would have been Fibreboard's likely annual claim filings by using the years of filing against OC.

### 8.2.1. Propensities to Sue Fibreboard

Table 23 shows the annual number of asbestos bodily injury claims received by Fibreboard for each type of asbestos related disease after the imputation of diseases, as described above. The patterns and trends for Fibreboard filings are highly similar to those for OC and for other asbestos defendants. Fibreboard's claims increased steadily from the early 1990s reaching a peak in 2000 when the company received 40,806 claims during the nine months preceding its bankruptcy, an annualized rate of over 54,000 claims. The large number of claims actually filed against Fibreboard in 1993 resulted from its Ahearn class action for future claims. Many plaintiffs' law firms accelerated the filings of Fibreboard claims so that their clients could participate in large group settlements that Fibreboard was negotiating before filing its class action and also to protect clients from the delay in payments that might result from the Ahearn class action settlement process. The large number of 1995 filings reflect the large number of OC filings in that year. Because Fibreboard had few actual settlements between 1994 and 1998, the filings in those years reported in Table 23 show that the plaintiffs actually filed against OC in those years. So the trends for Fibreboard that we saw above for OC in Table 10 will reappear here.

Figure 15 provides graphic representations of the increasing trends in Fibreboard filings for each of the three types cancers, using the imputed diseases shown in Table 23. Fibreboard's trend in annual pattern of claim filings is shared with other asbestos defendants: (1) steady increases in claims since the early 1990s (2) with biggest increases in the most recent years (3) interrupted by an unusually large number of claim filings in 1995.

**Table 23:** Number of Filings Against Fibreboard, By Imputed Filing Year and Disease

Filing Year	Disease					Total
	Meso	Lung	Othc	Nonm	Unsp	
No Info	2	14	1	64	155,788	155,869
Unkn	612	1,157	300	17,159	3,847	23,075
1970	0	0	0	0	2	2
1971	0	0	0	1	5	6
1972	0	0	0	1	4	5
1973	0	0	0	0	6	6
1974	2	0	0	9	17	28
1975	0	0	0	2	41	43
1976	0	0	0	3	104	107
1977	4	3	0	19	237	263
1978	4	7	1	64	1,002	1,078
1979	9	12	7	62	2,053	2,143
1980	20	33	18	215	3,373	3,659
1981	28	55	35	443	3,490	4,051
1982	68	130	59	1,223	4,056	5,536
1983	90	167	76	1,278	4,473	6,084
1984	124	238	105	1,596	3,436	5,499
1985	223	461	165	4,342	3,913	9,104
1986	364	1,003	344	9,662	4,456	15,829
1987	567	1,426	464	11,244	3,535	17,236
1988	535	1,211	327	11,733	4,936	18,742
1989	548	1,242	364	12,131	5,704	19,988
1990	681	1,468	456	13,552	4,383	20,540
1991	688	1,162	265	13,946	2,189	18,250
1992	718	1,462	399	23,275	3,626	29,480
1993	606	1,108	287	18,721	23,558	44,281
1994	828	1,542	455	22,458	3,797	29,080
1995	1,259	2,697	1,109	49,276	7,335	61,676
1996	1,081	1,852	567	30,634	1,916	36,050
1997	1,016	1,638	517	28,922	1,040	33,132
1998	1,053	1,476	554	29,479	1,617	34,179
1999	1,143	2,024	671	39,938	2,731	46,508
2000	1,507	2,123	605	34,345	2,189	40,768
[Ann00]	2,009	2,831	807	45,793	2,919	54,357
Total	13,778	25,697	8,150	375,733	103,071	526,428

Notes: After allocation to disease categories. 155,869 claims with unknown filing dates are from records with a claim category of "OTHER" and effectively no disease or settlement information, which we assume are not compensable claims. Entries for 2000 are filings through October 5, 2000. Annualized filings for 2000 are shown in the "Ann00" row. Totals are based on 2000 filings through September and exclude the "no information" claims. The unspecified category (Unsp) includes both of Fibreboard's categories "none" and "unknown."

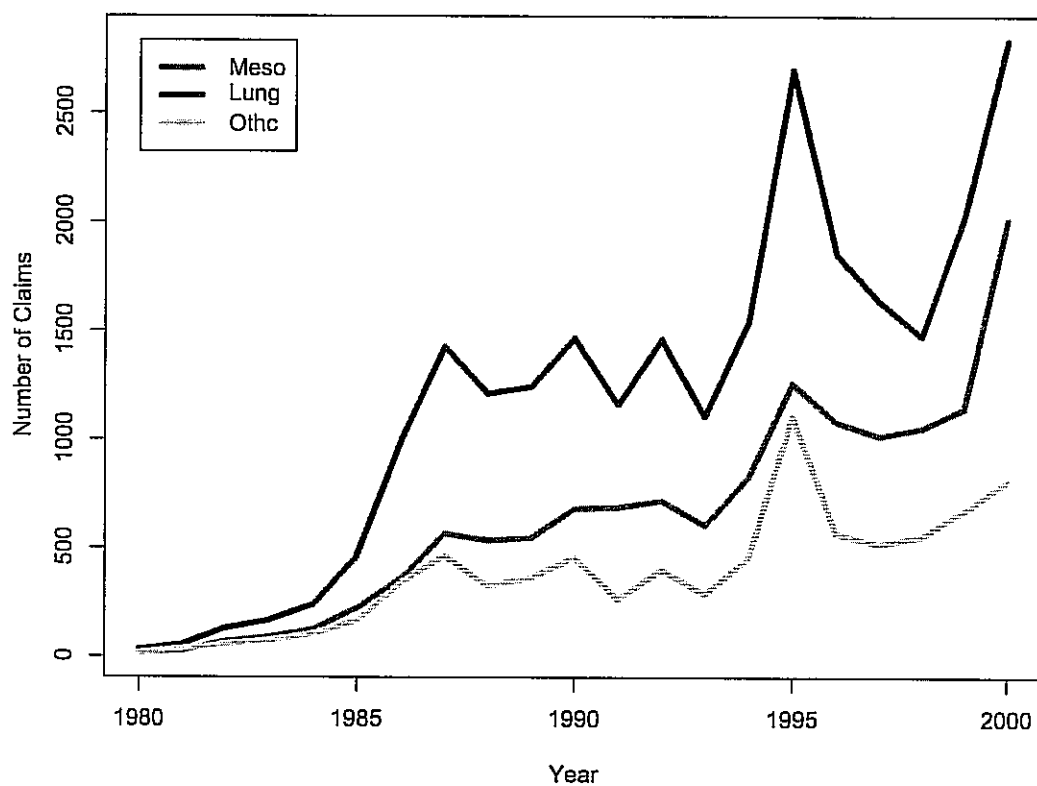
**Figure 15: Number of Cancer Filings Against Fibreboard**

Figure 16 compares Nicholson's forecast of mesothelioma deaths between 1990 and 2000 (2000 filings annualized) with the number of mesothelioma claims filed against Fibreboard in those years.

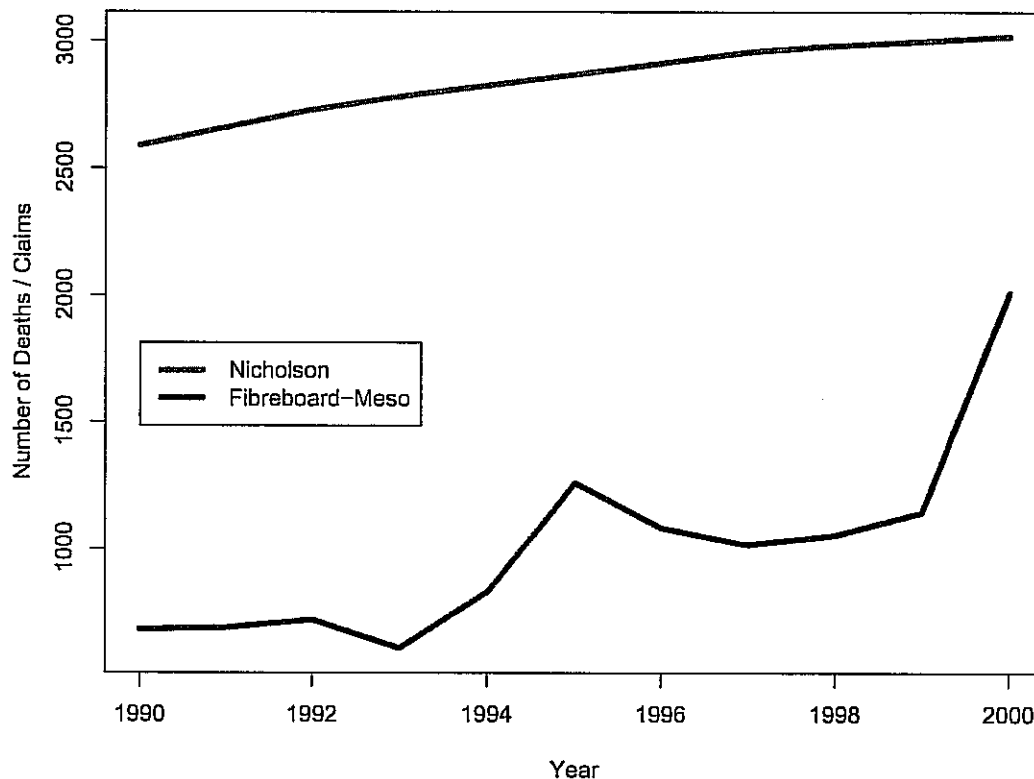
**Figure 16: Nicholson Meso Incidence Forecasts vs Fibreboard Actual Claims**

Table 24 below shows the annual propensities to sue calculated for each of the three types of asbestos-related cancers for each year since 1990. From the early 1990s propensities to sue increased steadily for each cancer (taking into account the exceptional nature of 1995 filings) as the number of cancer claims filings increased. This pattern is shown again and again among asbestos defendants (again with the exception of Fibreboard and CCR members who were protected by injunctions related to their two class actions).

We used Fibreboard's claims experience during the almost five year period from January 1996 through September 2000 to forecast future claims that would be filed against Fibreboard after October 5, 2000. This five year "base period" represents Fibreboard's most current claims experience, the years immediately preceding the date of forecast.

Forecasts of future Fibreboard claims must take two matters into account: (1) the most recent level of claiming shown by the propensities to sue during years preceding Fibreboard's bankruptcy filing and (2) the fact that cancer filings and propensities to sue had increased over this period for all cancers, increasing sharply as of October 2000. Together these matters not only establish a starting point for forecasting future Fibreboard cancer claims based on the most recent propensity to sue, but also suggest that propensities to sue Fibreboard would likely continue their increase, exceeding the levels of the base period.

**Table 24:** Propensities to Sue Fibreboard, by Disease: 1990-2000

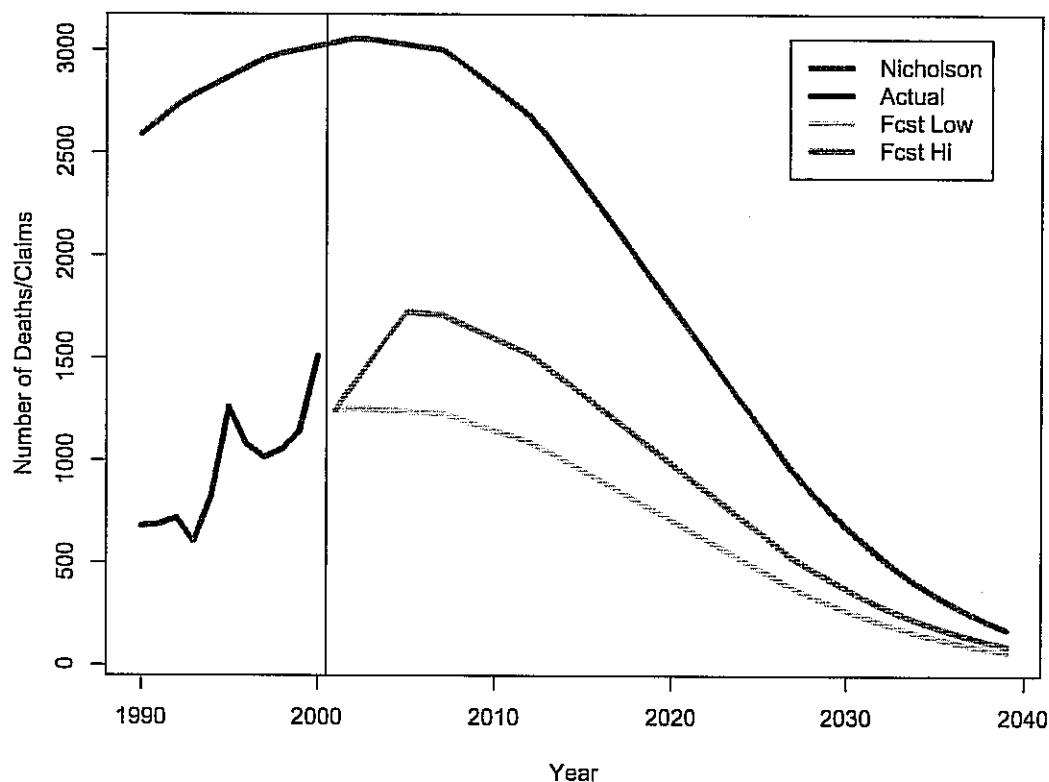
Filing Year	Type of Cancer		
	Meso	Lung	Othc
1990	26.1	26.8	30.5
1991	25.7	21.2	17.7
1992	26.1	26.6	26.7
1993	21.7	20.3	19.4
1994	29.2	28.5	31.1
1995	43.7	50.4	76.3
1996	37.0	34.9	39.4
1997	34.2	31.1	36.3
1998	35.3	28.7	39.7
1999	38.0	40.2	49.1
2000	66.4	57.5	60.5

We forecast the number of Fibreboard cancer filings for the first future year, the year following its petition for bankruptcy protection, using the propensities to sue from the base period. In other words we assume that the percent of cancer victims who would have filed claims against Fibreboard immediately after its bankruptcy would have been the same as the percent in the five years preceding its bankruptcy. Again, this is a conservative assumption. Rather than starting our forecasts at the level of Fibreboard's claim filings in 2000, the most recent year, we start at the lower level derived from Fibreboard's experience over the last five years.

Again, as with OC we have two alternative models about what would happen next:

- One model, the "Increasing" model, assumes that the increase in propensities that we observed in Fibreboard claims prior to the bankruptcy would have continued for five more years and then the propensities to sue would increase no further but would remain for all further years at the level reached in the fifth future year. The rates of increase in the propensity to sue would be the same as rates of increase in those measures observed generally among asbestos defendants during the 1990s. This model is the most plausible and represents continuation of the increasing claims that OC had experienced up to the date of its bankruptcy petition.
- The second model, the "No Increase" model, assumes that propensities to sue in all future years would remain at the levels of OC's propensities to sue during the base period. Because this model does not accurately reflect Fibreboard's experience at the time of its bankruptcy petition, it is not plausible. It is provided only as an illustration showing what would be Fibreboard's future liability if the level of its future claims could have been frozen at the levels during the five years prior to its bankruptcy, an unreasonable proposition.

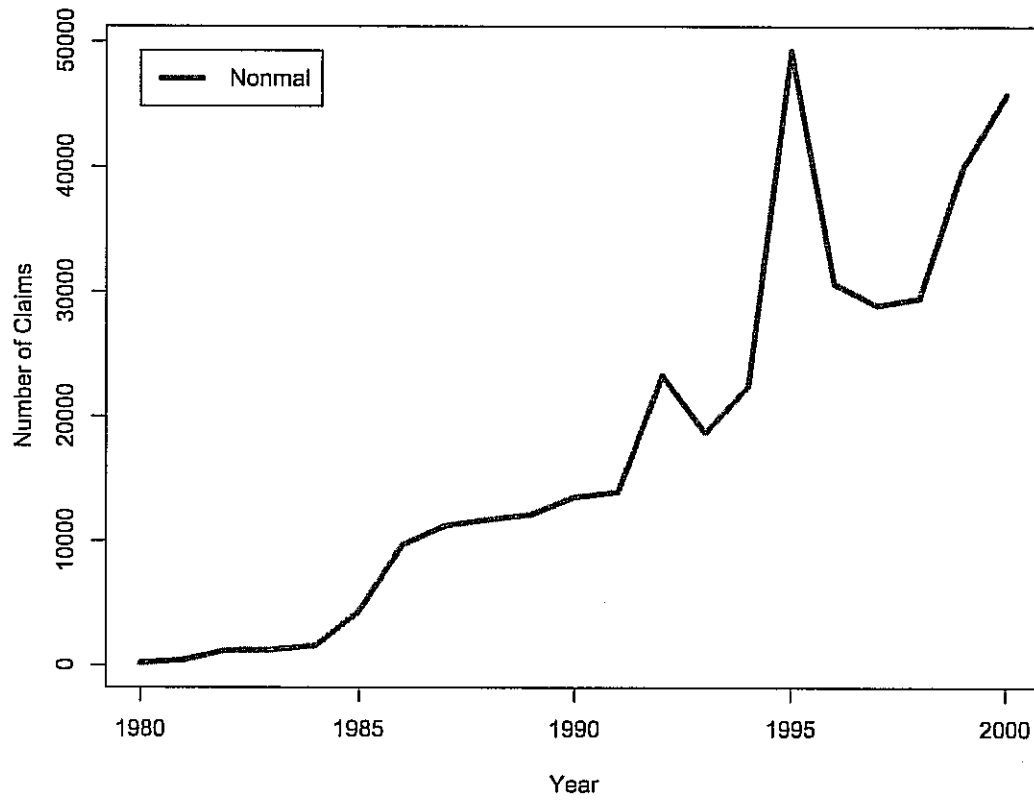
Figure 17 illustrates the forecast for mesothelioma claims, showing (a) the Nicholson forecast of nationwide mesothelioma deaths for all years from 1990 through 2039 (Nicholson's forecasts stop in 2030, but we extrapolated them forward through 2039), (b) annual mesothelioma claims against Fibreboard through 2000 and (c) the two alternative forecasts of future mesothelioma claims through year 2039. Illustrations of forecasts for lung cancer and other cancer claims would be similar to those in Figure 17.

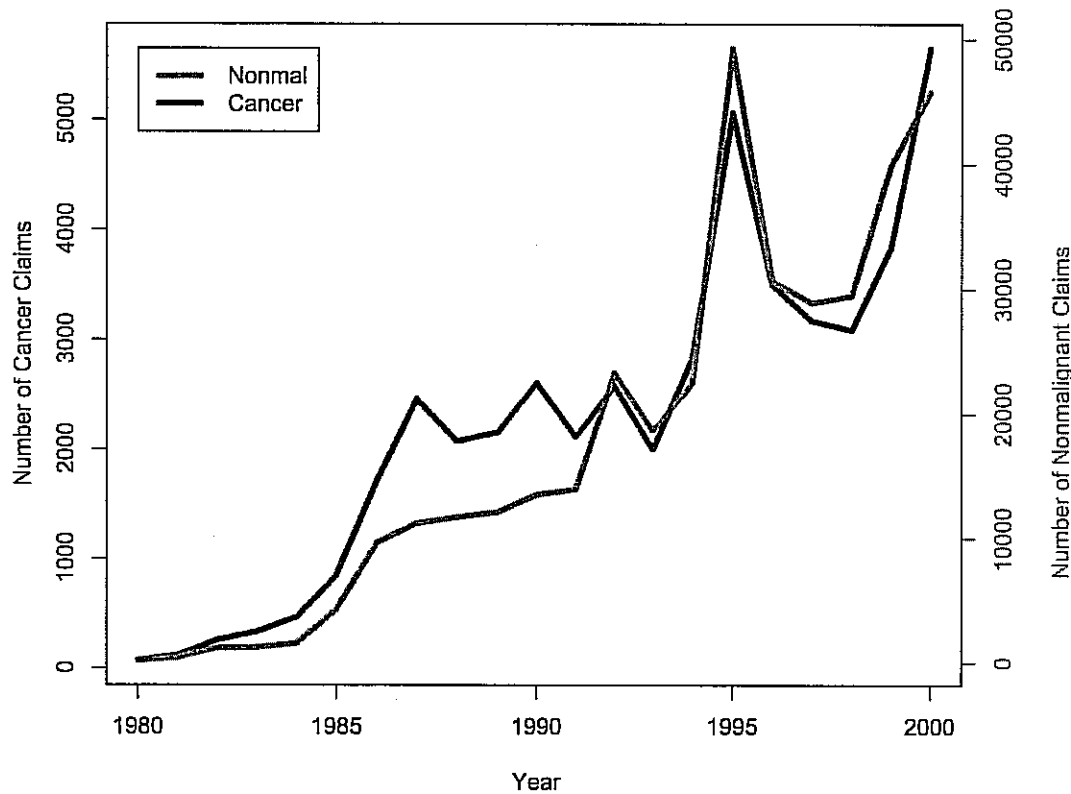
**Figure 17: Nicholson Meso Forecasts vs Fibreboard Projections**

### 8.2.2. Projection of Future Nonmalignancy Claims

The trend in annual filings of nonmalignant claims against Fibreboard is similar to its trends for cancer claims (Table 23). Figure 18 shows annual filings of nonmalignant claims against Fibreboard since 1980. To facilitate comparison of trends in cancer and nonmalignant claim filings, Figure 19 shows annual filings in each year from 1980 through 2000 using different scales for cancer claims and for nonmalignant claims. As Figure 19 demonstrates, throughout twenty years of its asbestos litigation the trends in annual filings of cancer and nonmalignant claims filed against Fibreboard have been almost identical, both year by year and as trends across the twenty years. While there is some year to year variation in trends for cancer and nonmalignant claim filings, trends for both types of diseases are highly similar since 1980.



**Figure 18: Annual Nonmalignant Claims**

**Figure 19: Comparison of Nonmalignant and Cancer Claim Counts**

In our forecasts for Fibreboard, we calculate the nonmalignant multiplier over the same 5 year period ending October 5, 2000 that we used to forecast future cancer claims, calculating the ratio of nonmalignant claim filings to cancer claim filings during those years. We then estimate the number of nonmalignancy claims that will be filed in a future year by multiplying our projection of cancer claims for that year by the nonmalignant multiplier or ratio of nonmalignant to cancer claims.

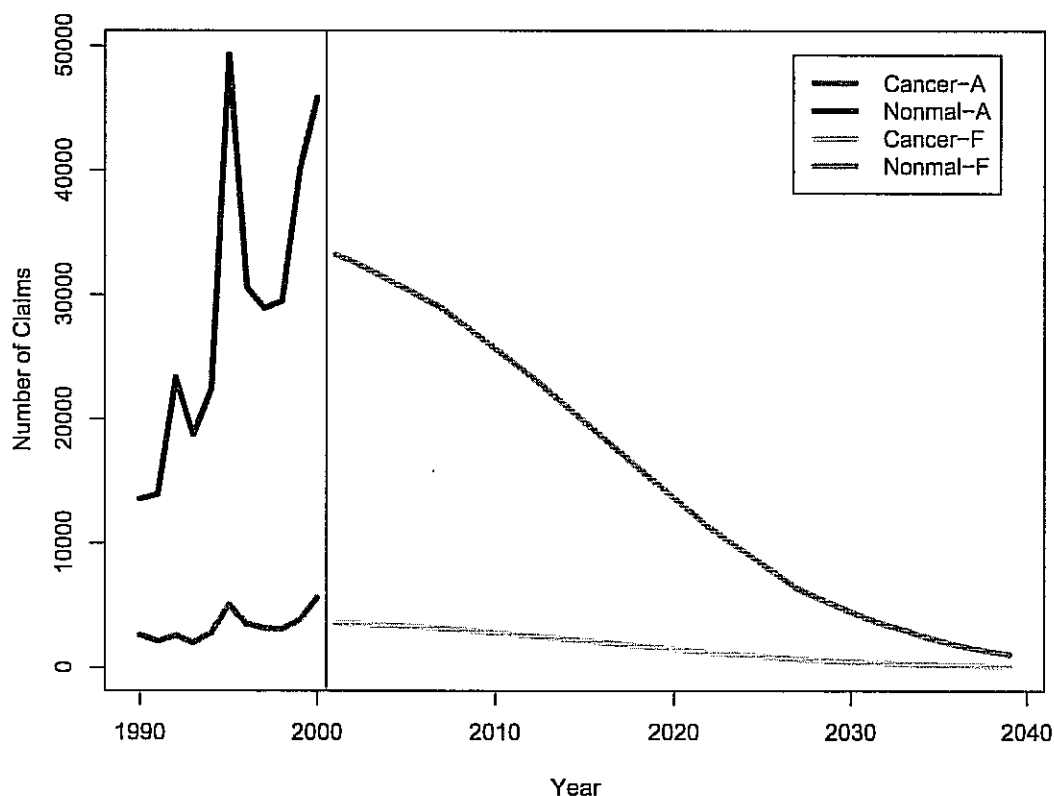
Again the projection for the first year after Fibreboard's bankruptcy starts with an assumption that the ratio of filings between nonmalignancy and cancer claims will continue to be the same as during the base period. Historically during the base period the number of nonmalignancy claims filed against Fibreboard has been approximately nine times as many as cancer filings. This means that initially nonmalignancy claims will be about nine times the number of cancer claims, i.e. 90% of all filings.

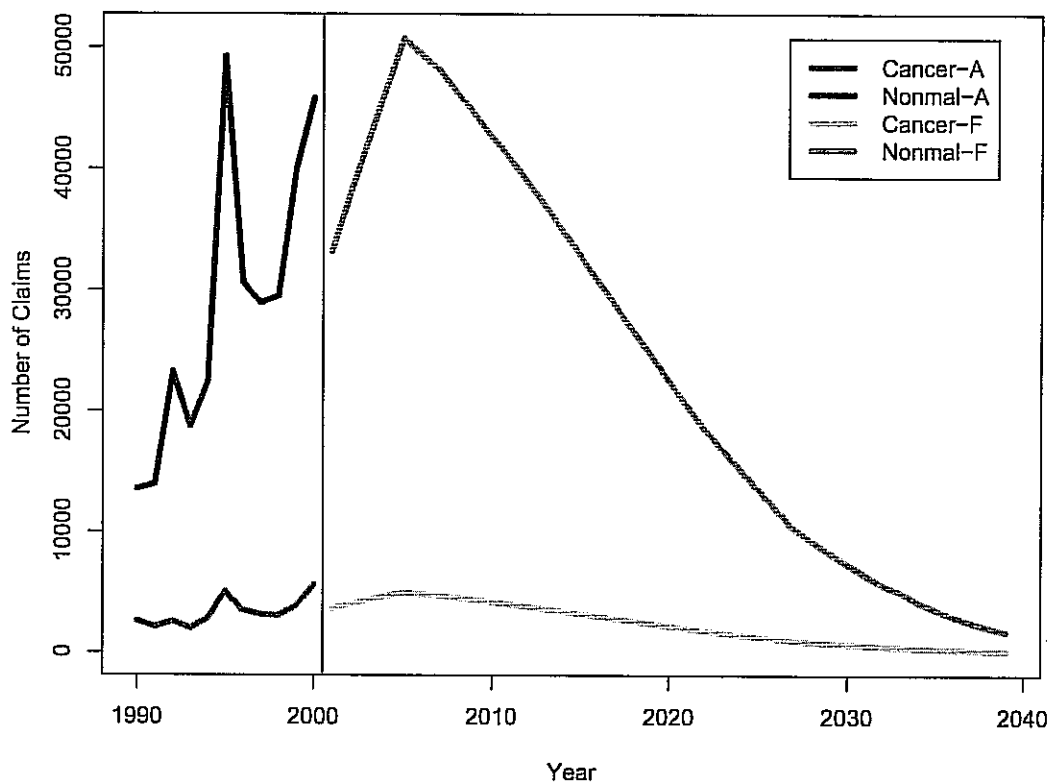
We then use two alternative assumptions about how this ratio of nonmalignancy cancer claims will change over time, assumptions that correspond to our two alternative assumptions about future changes in propensities to sue for cancer. The "Increasing" assumption, which is used together with the "Increasing" model of propensities to sue for cancers, assumes that the ratio of nonmalignancy to cancer claims will increase slightly over the next five years and by the end of five years will be about 11% greater than the ratio during the base period. Thereafter, the ratio of nonmalignancy to cancer claims will remain unchanged. This 11% increase represents the general experience among asbestos defendants during the 1990s and was calculated from the actual filing experience of the Manville Trust and the UNR Trust. The second, "No Increase" assumption, which accompanies the "No Increase" model of propensities to sue for cancers,

assumes that the ratio of nonmalignant to cancer claims observed during the base period will remain unchanged in all future years.

Figure 20 and Figure 21 illustrate these alternative models of future nonmalignant claims. Both figures show the number of claims filed against Fibreboard annually prior to the bankruptcy separated into cancer and nonmalignant claims: cancer claims appear at the bottom and nonmalignant claims appear above. For purposes of illustration Figure 20 shows the implausible “No Increase” model, with no future increase in either the propensity to sue or the nonmalignant multiplier. Figure 21 shows the preferred “Increase model,” with increases between 2002 and 2005 in the cancer propensities to sue and the nonmalignant multiplier.

**Figure 20: Actual And Projected Filings (No Increase)**



**Figure 21: Actual And Projected Filings (Increases)**

### 8.2.3. Forecasted Number of Future Claims

Table 25 shows the results of the forecasts for each of the two models, the preferred “Increasing” models and the “No Increasing” model which is included only to show future liability should the rate of claiming be implausibly frozen in time. Appendix B Tables B5 and B6 show the forecasted filings for each disease for each year from the last quarter of 2000 to 2039.

**Table 25: Number of Forecasted Claims Filed After October 5, 2000**

Model	Disease				Total
	Meso	Lung	Othc	Nonm	
Increasing	37,033	40,402	15,167	933,221	1,025,823
No Increase	27,568	28,699	9,152	599,341	664,760

### 8.2.4. Estimating Liability for Forecasted Future Claims

To value future claims we used the same values that we used for valuing pending claims, the average amount paid by Fibreboard during the 4.75 years in October 2000 to resolve claims for each type of disease (see Table 17, above).

In forecasting the values of future claims, we assumed that payments would be adjusted for future inflation at a rate of 2.5 percent per year. This rate was obtained from the forecasts of the

Congressional Budget Office. Table 26 shows the value of future claims based on each of our two alternative assumptions about the rate of filing of future claims, using values obtained from recently resolved claims adjusted for future inflation.

**Table 26: Forecast Indemnity for Future Claims after October 5, 2000**

Model	Disease				Total
	Meso	Lung	Othc	Nonm	
Increasing	\$7.3	\$1.6	\$0.3	\$5.7	\$14.9
No Increase	5.3	1.1	0.2	3.6	10.3

Notes: Billions of Year 2000 dollars. Future claims are assumed to settle 2 years after filing. Indemnity is inflation adjusted at 2.5% per year.

The results in Table 26 estimate the value that we forecast for future claims in terms of the dollars of the year when claims are allowed--these represent the amounts of allowances in each future year. However, these do not represent the present value of Fibreboard's liabilities. Since these liabilities will mostly arise in future years, Fibreboard would not need to put aside this entire amount to pay these future claims. Rather any non-insurance assets held by Fibreboard would presumably earn income. To the extent of such earnings, Fibreboard could reserve fewer assets to pay these claims. Table 27 shows the estimated present value of these liabilities, based on a discount rate of 6% provided by L. Tersigni Consulting, financial advisors to the Asbestos Claimants Committee.

**Table 27: Present Value (PV) of Future Claims as of October 5, 2000**

Model	Disease				Total
	Meso	Lung	Othc	Nonm	
Increasing	\$3.0	\$0.7	\$0.1	\$2.5	\$6.4
No Increase	2.3	0.5	0.1	1.6	4.5

Notes: Billions of Year 2000 dollars. Future claims are assumed to settle 2 years after filing. Indemnity is inflation adjusted at 2.5% per year. Discount rate is 6%.

## 9. Fibreboard's Total Asbestos Liability, October 2000

To estimate Fibreboard's full obligations for present and future asbestos claims, we added its forecasted indemnity for pending claims and for future claims. Table 28 shows these calculations based on using each of the two alternative estimates of the number of future claims.

**Table 28:** Fibreboard's Total Liability for Indemnity as of October 2000

Type of Expense	No Future Increase	Future Increase
Indemnity, Pending Claims	\$1.3	\$1.3
Indemnity, Future Claims	10.3	14.9
Total Liability	\$11.6	\$16.2

Notes: Billions of Year 2000 dollars. Pending claims are assumed to average 2 years to settlement. Future claims are assumed to settle 2 years after filing. Indemnity is inflation adjusted at 2.5% per year.

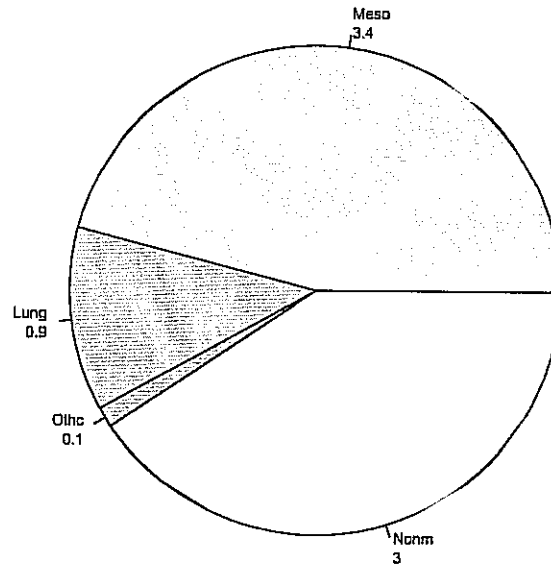
Table 29 shows the present value of Fibreboard's forecasted obligations for indemnity for asbestos claims as of October 2000, using the discount rate assumptions described above.

**Table 29:** PV of Fibreboard's Total Liability for Indemnity October 5, 2000

Type of Expense	No Future Increase	Future Increase
Indemnity, Pending Claims	\$1.1	\$1.1
Indemnity, Future Claims	4.5	6.4
Total Liability	\$5.6	\$7.5

Notes: Billions of Year 2000 dollars. Pending claims are assumed to average 2 years to settlement. Future claims are assumed to settle 2 years after filing. Indemnity is inflation adjusted at 2.5% per year. Discount rate is 6%.

Figure 22 shows how the present values of Fibreboard's obligations are distributed among the different types of diseases for the future increase (preferred) model.

**Figure 22: Distribution of PV of Total Liability, by Disease: Future Increase Model**

## 10. Alternative Assumptions and Sensitivity Analyses

In this Section I review criticisms and alternatives to the assumptions that we used for our forecasts of asbestos liabilities for OC and Fibreboard. First, I discuss criticisms and assumptions raised by Credit Suisse First Boston (“Credit Suisse”) in its motion to obtain a sample of medical records. Then I discuss and evaluate key assumptions made by Dr. Thomas E. Vasquez in his analysis of liabilities for the Debtors. Finally, to assess uncertainties in our forecasts I identify and discuss other assumptions that might have raised or lowered our estimates of liabilities had we used those alternatives.

The arguments raised by Credit Suisse and some of the assumptions made by Dr. Vasquez must be rejected as technically unsound or unsupported or inappropriate for the process of estimating aggregate values of the claims by asbestos bodily injury creditors in this bankruptcy for reasons that I discuss in detail in this Section. For other alternatives that have some plausibility I describe in Section 10.3 results of sensitivity analyses in which we reran our forecast analyses. These sensitivity analyses show the significance of potential criticisms and alternative assumptions by examining how assumptions affect our liability forecasts. Although none of these alternative assumptions are as strong as those that we used in deriving our estimates of OC’s and Fibreboard’s aggregate liabilities, the sensitivity analyses permit the Court and parties to understand how our forecasts would have changed had we used these alternatives.

### 10.1. Response to Credit Suisse First Boston Criticism

Credit Suisse criticizes forecasts of OC and Fibreboard asbestos liabilities that I “will likely” make based on their attribution to me of an assumption that I do not in fact make (and never have

made), which they claim is shown to be “false and unsupportable” by “the Friedman and Hopkins reports.” Credit Suisse misstates my work and misrepresents both the Friedman report for OC and what it calls the “Hopkins report” (a recent article by Gitlin, Cook, Linton and Garrett-Mayer in an on-line journal *Academic Radiology*), two flawed studies that do not speak to the estimation of OC’s and Fibreboard’s asbestos liabilities.

Credit Suisse falsely asserts that “Dr. Peterson’s method of estimation makes the assumption that, because the Debtors paid a very high percentage of all nonmalignant claims submitted in the past, such claims must have been valid” (Credit Suisse, p. 6). Credit Suisse misrepresents my forecasts. Under our legal system, determinations about the “validity” of claims are conclusions reached only by triers of fact after trials. I do not forecast such determinations and I certainly do not assume that “because the Debtors paid ... nonmalignant claims ... such claims must have been valid.” For both plaintiffs and defendants the settlement process represents compromise and efficiency. Both sides settle claims in order to avoid the cost and trouble of fully developing and trying cases. For both sides the settlement is a hedge on the bet about what a trial would produce. In settling a claim the Debtors do not necessarily accept that the claim is valid, rather they settle because a settlement saves them money: the settlement avoids litigation costs and it avoids the risk that the plaintiff would prevail at trial. Some of the cases that OC and Fibreboard settled presented them with great litigation risks and received large settlements; others were cases that presented small litigation risks and received small settlements. Credit Suisse recognized these differences in noting that a “firms’ inventory might consist of claims of varying severity” (Footnote 3, page 2).

My forecasts estimate what OC and Fibreboard will pay on claims that arise in and are resolved through the actual asbestos litigation process. As I state in the first paragraph of this report, the forecasts are “based on assumptions that extend into the future the pattern of past claim filings and indemnity payments” that the Debtors have made. As part of this past process that I assume would continue for purposes of making my forecasts, OC and Fibreboard refused to pay some claims and paid others minimal amounts. For example, as Credit Suisse noted in its motion, OC refuses to accept and pay claims based on medical reports from two of the doctors criticized in Dr. Friedman’s report (Footnote 13, p. 15). In short, my forecasts are based on assumptions about the behavior of OC and Fibreboard in paying claims. They do not need to and make no assumptions about claim validity, as Credit Suisse uses the term. Credit Suisse asserts that asbestos claims are “valid” only if the medical and exposure evidence is not subject to dispute. This definition is at odds with how claims are evaluated, valued and resolved in our legal system. If only undisputed claims are “valid,” the metric of value would then be OC’s average verdict history (see, Section 10.3.2.6 below), not its far lower resolution averages which are based on resolving both strong and weak cases.

More generally, because of their fundamental flaws, neither the Friedman nor Gitlin reports used by Credit Suisse to criticize my forecasts provide any reliable information about nonmalignant claims against OC and Fiberboard. Both studies have sampling errors that make them useless for generalization and the Gitlin article is so deficient in describing its research methods as to fail basic requirements of science or publishability in a reputable journal.

#### **10.1.1. Problems with the Friedman Report**

Dr. Friedman’s undated report to OC described his review of some medical documents for 1,691 asbestos injury claims submitted to the company. Dr. Friedman’s report provides information about the 1,691 claims that he reviewed, finding that most of those claims did not present asbestos-related impairments, thereby confirming what plaintiffs said about their medical conditions and what OC paid in resolving those claims.

The 1,691 asbestos claims reviewed by Dr. Friedman do not represent the universes of asbestos



injury claims submitted to OC or Fibreboard or of nonmalignant asbestos claims submitted to either. They resulted from a three-stage sampling process:

- select 22,578 claims from the universe of all OC claims (unclear whether OC or Dr. Vasquez selected these 22,578 claims from the over 500,000 OC claims) ;
- select a stratified random sample of 2,000 claims from the 22,578 (selection done by Dr. Vasquez);
- review medical records 1,691 of these 2,000 claims for which impairment assessments could be made.

As I show below, the results of Dr. Friedman's study have no application because Stage 1 introduced a striking and insurmountable bias into the sample and because Stages 2 and 3 required analytic steps that neither Dr. Friedman nor Dr. Vasquez nor anyone else has ever performed. Due to these biases and failures the results of Dr. Friedman's study simply have no application to any OC or Fiberboard claims other than the 1,691 claims that Dr. Friedman actually examined.

#### **10.1.1.1. Stage 1 Sampling Introduces Large Biases**

The group of 22,578 claims was not randomly drawn to represent all OC claims, but rather targeted certain types of claims, medical facilities and law firms. Most claimants (85%) in the 22,578 sample were from one state, Texas. Most claimants (81%) in the 22,578 sample were represented by only three law firms in Texas. Virtually all (99%) of these 22,578 claims were drawn from only 13 of OC's 42 categories of plaintiff's alleged diseases. The 22,578 claims included only 34 out of 256,097 claims that OC had evaluated as "nonmalignant condition," "moderate asbestosis," "asbestos related nonmalignant" or simply "asbestosis," one hundredth of one percent of these claims (i.e one in ten thousand). Because the group of claims from which Dr. Friedman's sample was drawn included no meaningful volume of these important disease categories, his results can say nothing about medical documentation for those claims. Because the 22,578 claims were so unrepresentative of all OC claims, Dr. Friedman's conclusions could not be meaningfully applied to all OC claims even if he had examined every one of the 22,578 claims.

Detailed information about the 1,691 claims examined by Dr. Friedman further confirms the unrepresentativeness of the 22,578 claims. Over 1,500 of the 1,691 claims examined by Dr. Friedman came from Texas; only one claim came from New York, one from Ohio, none from New Jersey, none from California—all states submitted large number of claims against OC and Fibreboard. Again, Dr. Friedman's study can say nothing about claims from these and other states that had no meaningful inclusion in his sample claims.

Data about their characteristics show that the sample of 1,691 claims given to Dr. Friedman for his review was not designed to give information generally about the universe of all OC or Fibreboard claims. Instead Dr. Friedman's 1,691 sample and the 22,578 claims from which his sample was drawn concentrated on a handful of medical facilities and doctors that OC had previously challenged. One third of the 1,691 claims given to Dr. Friedman for examination presented pulmonary function tests from four facilities that he criticized at length (Health Screen, Inc.; Industrial Health Council; Pulmonary Testing Services, Inc.; Respiratory Testing Services, Bessemer, AL) (because 282 claims did not provide pulmonary function test results, these four facilities represented over 40 percent of facilities providing such reports among the 1,691 claims). While these four facilities dominated the sample given Dr. Friedman and his conclusions about impairment, only 5 percent of all claims submitted to the Manville Trust include medical reports from one of these facilities.

Again, reflecting the biases in the 22,578 sample, 80 percent of the 1,691 claims selected by Dr. Friedman relied on medical reports from just five pulmonologist "B" readers of x-rays, with one pulmonologist, Dr. Raymond Harron, supplying medical reports in 46 percent of these claims. Again, this concentration was artificial. Manville data show that 10.7 percent of all claims included a medical report from Dr. Harron, 4.2 percent included a medical report by Dr. Segarra and 2.3% included a medical report by Dr. Kuebler, the three B readers identified by Credit Suisse. Instead, the concentration was created by OC and its consultant, Dr. Vasquez, in their selection of the 22,578 claims from which Dr. Friedman's sample was drawn. OC directed Dr. Friedman to examine primarily those doctors that it had so heavily criticized that OC had already refused to accept further medical reports from two of five doctors, as Credit Suisse pointed out (Footnote 13, p. 15).

#### **10.1.1.2. Stage 2 Sampling Requires Adjustment for Stratification**

As Dr. Friedman notes, the 2,000 claims derived in Stage 2 are a stratified random sample drawn from the 22,578 claims. Stratification is a technical term used in scientific sampling that means that sampled claims have different probabilities of being sampled. Stratification is a method that preserves the overall randomness needed for meaningful sampling while permitting an oversampling of certain important but infrequent items (e.g. claims from a small, high paying jurisdiction) so that enough of those infrequent items can be included for examination. A stratified random sample is not a simple random sample where all members of a population have equal probabilities of being sampled. Whereas the results of a simple random sample can be applied directly to the population from which the sample was taken (subject to uncertainties and missing responses), results of a stratified random sample cannot be directly applied. Rather, the results for each sampled item (here each sampled claim) must be multiplied by the inverse of its sampling probability in order to apply the results to the underlying sampled population. If, for example, claims from a particular small, high-paying jurisdiction are oversampled so that each claim from that state has a 10 times greater probability of being sampled than claims in other states, then results for those claims from this small, high-paying state that are included in the sample must be multiplied by one-tenth in order to derive conclusions that can be applied to the overall population of claims from which the sample is drawn.

Here, Dr. Friedman notes that the sample given him had "12 stratifications" (p. 2). Because it is not a simple random sample, the results of Dr. Friedman's study cannot be applied to the 22,578 claims from which the stratified sample was drawn unless the results are adjusted for the differing selection probabilities for each stratification. Both Credit Suisse and Dr. Vasquez incorrectly assert that the results of Dr. Friedman's study apply directly to larger populations of OC claimants without correcting for the sampling weights that Dr. Vasquez used in drawing the stratified sample.

#### **10.1.1.3. Stage 3 Sampling Requires Adjustment for Missing Cases**

Dr. Friedman had data for 1,691 claims, but this was not the entire stratified random sample of 2,000 claims drawn by Dr. Vasquez. We do not know why 309 claims were missing; perhaps their medical reports were unavailable. But the absence of these 309 claims defeats the sample, which is no longer random and which is no longer true to the sampling weights used to draw claims. Because this type of drop-out is not uncommon in sampling, various techniques are used to save samples that experience drop-out. A sampling researcher can identify in advance a back sample with substitutes for each sampled claim should data for an originally sampled claim be unavailable. Or the researcher can look at characteristics of cases from which claims were drawn and those that dropped out in order to infer possible effects of the lost cases. Here, no attempt has been made to determine the effect of losing over 15 percent of the stratified sample, nor has any attempt been made to correct for biases that might have resulted. We simply do not know the